Application/Control Number: 10/535,399 Page 2

Art Unit: 2629

## **DETAILED ACTION**

## Election/Restrictions

1. Claims 17-31, 33, 36, and 38 are allowable. Claims 25-27 and 34-35, previously withdrawn from consideration as a result of a restriction requirement, and require all the limitations of an allowable claim. Pursuant to the procedures set forth in MPEP § 821.04(a), the restriction requirement between inventions species I-IV as set forth in the Office action mailed on 1/29/2010 is hereby withdrawn and claims 25-27 and 34-35 hereby rejoined and fully examined for patentability under 37 CFR 1.104. In view of the withdrawal of the restriction requirement, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

## Allowable Subject Matter

- 2. Claims 17-31, 33-36 and 38 are allowed.
- 3. The following is an examiner's statement of reasons for allowance:

Regarding claim 17, none of the prior art, either singularly or in combination, teaches or fairly suggests a data input device *comprising in sequence the combination* of limitations including: at least one voltage divider sensor having a second ohmic resistor extending substantially along the one of the at least two rows of keys

Application/Control Number: 10/535,399

Art Unit: 2629

associated with the unidirectional position detector, a first end of the second ohmic resistor forming the first input connection of the unidirectional position detector, and a second, opposite end of the second ohmic resistor forming the second input connection of the unidirectional position detector; wherein the output connections of each of the plurality of unidirectional position detectors are connected to the first ohmic resistor at different locations between the first and second ends of the first ohmic resistor, and the first input connections of each of the plurality of unidirectional position detectors are connected together to form the first terminal of the data input device and the second input connections are connected together to form the second terminal of the data input device.

Page 3

Regarding claim 20, none of the prior art, either singularly or in combination, teaches or fairly suggests a data input device *comprising in sequence the combination* of limitations including: the plurality of discrete switches being connected on a first side to the output connection of the position detector and on the other side to the second ohmic resistor at different locations between the first and second input connections of the position detector, wherein the output connections of the unidirectional position detectors are connected to the first ohmic resistor at different locations between the first and second ends of the first ohmic resistor, and the first input connection of the unidirectional position detectors are connected together to form the first terminal of the data input device and the

Application/Control Number: 10/535,399

Art Unit: 2629

second input connections are connected together to form the second terminal of the data input device.

Page 4

Regarding claim 25, none of the prior art, either singularly or in combination, teaches or fairly suggests a data input device *comprising in sequence the combination of limitations including:* said voltage divider-like sensors being laid out in series, each of said voltage divider-like sensor including a second ohmic resistor extending substantially along the row of keys, conducting lines extending from the second ohmic resistor and arranged at a certain distance from one another, a comb-like conductor, having teeth are arranged in an interdigital manner between said conducting lines, and an activation layer made of semiconductor material, wherein the output connections of the unidirectional position detectors are connected to said first ohmic resistor at different locations between said first and second ends of said first ohmic resistor, and the first input connections of said unidirectional position detectors are connected together to form said first terminal of the data input device and the second input connections are connected together to form said second terminal of the data input device.

Regarding claims 18, 19, 21-24, 26-31, 33-36 and 38, they are dependent upon the allowable independent claims presented above and are allowable based on dependency.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENNETH B. LEE JR whose telephone number is (571)270-3147. The examiner can normally be reached on Mon. - Fri. 7:30AM - 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on 571-272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin M Nguyen/ Primary Examiner, Art Unit 2629 /Kenneth B. Lee Jr./ Examiner, Art Unit 2629